

Remarks/Arguments:

Claims 1-28 are pending in this application. Claims 1-13 are allowed and claims 14-28 are rejected. Claims 14 and 25 have been amended.

Applicants thank the Examiner for allowing claims 1-13.

Claims 14-28 stand rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,133,732 ("Wiktor"). Applicants respectfully traverse these rejections and submit that independent claims 14 and 25 have been amended to be patentable over the art of record for at least the reasons set forth below.

Response to Prior Art Rejections of Claims 14 and 25 - Based on Wiktor

The Office Action rejects independent claims 14 and 25 under § 102(b) based on Wiktor. Applicants respectfully submits, however, that the claimed invention includes structural features that are readily distinguishable from those disclosed by the cited reference. Applicants' invention, as recited by independent claim 14, includes features which are neither disclosed nor suggested by the art of record, namely, "wherein at least one apex section comprises two struts attached thereto with one strut longer than the other strut, in which for each apex section comprising one strut longer than the other, the two struts lie on a common cylindrical surface having a common radius relative to a longitudinal axis of the stent." Similarly, Applicants' invention, as recited by independent claim 25, includes at least the following features that are neither disclosed nor suggested by the art of record, namely, "the non-uniform apex sections and the generally uniform apex sections all lying on a common cylindrical surface having a common radius relative to a longitudinal axis of the stent." Support for amended claims 14 and 25 can be found, for example, in the specification at page 4, paragraph 22 and in the Figures. No new matter has been added.

Although the phrase "cylindrical surface having a common radius relative to a longitudinal axis of the stent" is not used in the specification, the specification inherently discloses this limitation. A cylinder can be defined as "the surface generated by a straight line intersecting and moving along a closed plane curve, the directrix, while remaining parallel to a fixed straight line that is not on or parallel to the plane of the directrix."

<http://www.answers.com/topic/cylinder>. As described in Applicants' specification, the stent is "generally cylindrical" (Paragraph 20) and the mandrel on which the stent is formed is "typically

cylindrical.” (Paragraph 22). The mandrel shown in Fig. 10 of the application does not show any changes in radius along the mandrel. A stent formed on a cylindrical mandrel having a common radius throughout inherently takes the form in which all of the struts and apices lie on a cylindrical surface having a common radius. Although the specification is not limited to stents having a cylindrical geometry with a common radius, and other embodiments may have different geometries, at least one cylindrical embodiment with a common radius is clearly disclosed, and claims 14-28, as amended, are drawn to that embodiment.

Unlike Applicants’ claimed invention, Wiktor discloses, with reference to Fig. 8 and as described in the specification with respect thereto, that “[e]longated waves 48 are bent to form a loop or hook 50. Each hook 50 is looped over a wave 46 adjacent.” (See col. 7, lines 20-21). Therefore, as shown in Figure 8, hook 50 comprises an apex section having two very short struts. Each short strut is also part of an oppositely pointing apex section that comprises a short strut and a long strut. For the purposes of this response, it is assumed that these apex sections having the long strut and short strut are the ones referred to in the Office Action as analogous to the Applicants’ claimed features. In the Wiktor construction, however, the short strut inherently juts radially outwardly relative to the long strut and therefore the struts do not lie on a cylindrical surface having a common radius. This outward bending of elongated waves 48 facilitated by this orientation of the short struts relative to the long struts enables hooks 50 to engage adjacent waves 46. The purpose of this feature, as disclosed in Wiktor, is to prevent longitudinal overstretch of the stent. (Col. 7, lines 12-14). Thus, Wiktor teaches away from a construction in which each apex section having a long strut and a short strut comprises both struts lying on a cylindrical surface having a common radius.

Claim 25 also similarly recites the feature of having all apex sections, including uniform and non-uniform apex sections, lying on a cylindrical surface having a common radius relative to a longitudinal axis of the stent. Similar to that as noted above with regard to claim 14, Wiktor does not teach, disclose or suggest this feature, but instead clearly shows at least some apex sections that do not lie on a cylindrical surface having a common radius with respect to all of the other apex sections. The design of the device disclosed in Wiktor’s Figure 8, to which the Office Action refers, necessarily has at least some apex sections that are not located on a cylindrical surface having a common radius with other apex sections of the stent, because apex sections located radially outward of other apex sections are required in order for hooks 50 to engage adjacent waves 46 as illustrated in Figure 8. In particular, the apex section comprising

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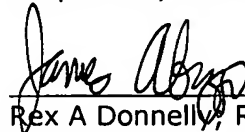
the two short struts and connecting apex that forms each hook 50 does not lie on the a cylindrical surface having a common radius with, for example, the adjacent wave 46 that hook 50 is looped over.

Applicants respectfully submit, therefore, that independent claims 14 and 25 are patentable over Wiktor. Claims 15-24 and 26-28 are also patentable over Wiktor at least for the same reasons that claims 14 and 25, on which they are dependent, are patentable, but may be separately patentable for additional reasons as well.

Conclusion

For all of the above reasons, Applicants respectfully submit that the rejections under 35 U.S.C. § 102(b) should all be withdrawn and all of pending claims 14-28 should be allowed.

Respectfully submitted,



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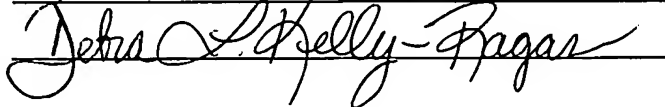
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